

G2 Engineering & Management, Inc.

EPA Administrator's Award
Outstanding Accomplishments
by an 8(a) Business

G2's Distinguishing Factors

- **G2 earned the EPA Administrator's Award for Outstanding Accomplishments by an 8(a) Business**
- **BWXT Y-12, LLC and G2 earned the DOE Secretarial Award as the Small Business Mentor-Protégé Team of the Year, 2005**
- **SBA-certified 8(a) small disadvantaged business**
- **Awarded two EPA emergency response contracts in Regions 4 and 8**
- **Founded in May, 2000**
- **BWXT Y-12, LLC. Small Disadvantaged Business of the Year, 2003**
- **Recognized leadership and numerous letters of commendation from customers**

Success . . . the only option!

Overview

G2 Engineering & Management, Inc. (G2) provides high quality technical and professional engineering and management services that focus on customer satisfaction and quality performance. Our core capabilities are focused in two areas: Project Management and Technical Support Services. We offer top quality professionals for these services, which enables us to find solutions to meet our clients' needs.

G2's well-credentialed, qualified professional technical staff has formal training in technical disciplines including engineering, the life sciences, and the physical sciences, as well as extensive expertise acquired on the job. Our personnel have many years of experience

working with prime contractors in support of Federal and commercial agencies. G2's team is committed to being reliable, dependable, and responsive to customer and job requirements.

G2 personnel maintain a high level of commitment and a strong work ethic, with proven skills evidenced by numerous letters of commendation from clients that recognize their contributions to various projects. Our proven experts have previously provided support for a large cadre of technical areas. G2 personnel have been recognized leaders and contributing partners for numerous activities and projects, some of which are described herein.



Michael L. Twine, President and CEO

Areas of Expertise

G2's services can be offered à la carte or on a turnkey basis. G2 personnel have performed at various Federal and a wide variety of commercial sites per applicable regulations. G2 currently has specialists on staff with experience and capabilities in the following areas:

- Project Management
- Work Control
- Conduct of Operations
- Conduct of Engineering
- Conduct of Maintenance
- Safety Basis Management
- Operational Readiness Review (ORR) / Readiness Assessments
- Programmatic Support
- Facility and Operations Support
- Facility Assessments
- Nuclear Safety Management
- Disciplined Operational Management
- Engineering Services
- Construction Management
- Emergency Response Management

For additional info or to discuss further opportunities, please contact Rose Raney, Proposal Manager, at 865-482-4271 or at r.raney@g2em.com.



The G2 Approach

Because G2 takes a forward leaning approach, we are adept at providing reliable services for very complex projects that require careful consideration of all technical, economic, political and social factors. We are consistently on time and within budget, and we tailor our performance to meet the unique needs of each client. G2 approaches every activity that we perform with the basic credo that **success is the only option!**

G2 has extensive experience in performing turnkey services for our clients

Turnkey Services

G2 has extensive experience in performing turnkey services for our clients through the following disciplined process:

Analysis of project requirements and regulations

G2 consistently rises to the occasion to perform effectively on these complex tasks, with the goal of making it as easy for our customers as possible. G2 ensures that specialty contractors communicate directly with project management concerning project cost, staffing, scheduling, work performance, etc., through the use of tools such as project status reports to ensure that all work is performed per contract specifications and client expectations.

Project implementation

Our turnkey services begin with thorough project planning and coordination with subcontractors and regulatory agencies. G2 applies a graded approach to all projects, thus ensuring efficient, effective operations that meet all applicable requirements. G2 can rapidly organ-

ize resources and coordinate complex projects, establishing professional operations and providing quality, dependable equipment in an expedited manner. This requires a comprehensive understanding of multiple factors and planning for contingencies. Because clear, concise communication of project requirements is of the utmost importance, G2 implements project-specific training so that all personnel can mobilize rapidly with confidence to perform their tasks. Our management staff is closely involved with all stages of the project and can make recommendations to ensure that modifications in the process or other methodology changes can be performed quickly and effectively. All of our staff members are empowered with stop work authority to ensure a safe, efficient work environment.

Quality assurance / quality control verification

G2 also provides logistical and operational support to ensure that the project is moving forward and that it

meets or exceeds the client's expectations prior to turnover. G2 will consistently ensure that newly established facilities meet applicable requirements and regulations.



À la Carte Services

G2 provides à la carte services, including engineering, operations support, and readiness assessments to support acquisition of new facilities and systems and upgrades for existing assets. G2 has a proven track record of supporting engineering efforts of all sizes and durations, and we are able to partner with our customers as needed, integrating our resources within our customers' project teams for seamless project delivery. G2 can add value at any phase of a project, from design and construction management (GC License No. 00054974) to project controls and system integration and commissioning.

G2's à la carte service offerings are as follows:

- Project Management
- Construction Management
- Warehouse Management
- Inventory Tracking and Control
- Safety Analysis
- Waste Management
- Environmental Services
- Project Controls
- Procurement Assistance
- Expediting
- Title I, II, and III support/oversight
- Readiness preparation assistance
- Readiness assessments
- Process documentation assistance
- Full A&E support from civil, electrical, nuclear, mechanical, and certified professional engineers



G2 understands the benefits of maintaining a workforce that has a working knowledge of operations and a proven history with the client. All current G2 employees have been personally selected and recruited by the principal owners of the company. All employees were chosen based on their diverse skill sets and proven performance in their fields. Over the last five years, G2 has enjoyed an average turnover rate of less than 0.37%, including all G2 full-time and subcontractor per-

sonnel. Our clients are very pleased with the personnel we offer, and our employees are pleased with the corporate philosophy and structure. This combination of employee and client satisfaction results in a working environment that promotes employee dedication and loyalty that enables G2 to fulfill its corporate mission statement: "To add measurable value to our clients by being responsible and dependable stewards in the conduct of day-to-day operations."

G2 employees average over 25 years of technical/professional experience, much of which has been gained at multiple Federal and commercial operations. More than 90% of our technical staff members hold current security clearances. Our employees consistently understand company expectations, and G2 provides the support necessary to ensure that they are unencumbered to respond to the task at hand.

G2 has a proven track record of supporting engineering efforts of all sizes.



Project and Personnel Experience

G2 personnel maintain a high level of commitment and a strong work ethic, with proven skills evidenced by numerous letters of commendation from clients that recognize their contributions to various projects. Our proven experts have previously provided support for a wide range of technical areas. G2 personnel have been recognized leaders and contributing partners for numerous activities and projects, some of which are detailed below.

Construction Management

- Project management for the construction of a \$23M research facility
- TN GC License No. 00054974
- Engineering / construction and D&D experience as Field Engineer, Project Leader, and Facilities Manager
- Conduct of pre-construction meetings and field walkthroughs
- Development of design directives, approval of final drawings, specifications, and equipment operation guide lines
- Expertise in labor relations, procurement, ES&H, dispositioning of materials, electrical installation, project closeout and transition
- Solicitation and evaluation of construction bid packages and evaluation of contractor safety programs for OSHA compliance
- Monitoring of project milestones and contract performance standards
- Development of engineering and construction time estimates and cost analyses

Facility Management

G2 personnel have been recognized leaders and contributing partners for numerous activities and projects.

- Management of \$20M on-specification surplus highly enriched uranium disposition program
- Management of a reactor and personnel safety program during maintenance and testing of nuclear reactors for the Department of the Navy
- Facility management for a \$50M building and a multi-million dollar special nuclear fuel material inventory
- Facility management and direct supervision of configuration control authorities, lockout/tagout management, and coordination of limiting condition for operations surveillance and tracking
- Supervision of the facility support group for a nuclear manufacturing facility
- Direction and completion of a \$46M infrastructure project to restore, renovate, and improve a weapons facility's sanitary sewer system
- Management of decommissioning of a radiation criticality test laboratory
- High-level project management for a former plutonium pit production facility
- Development of engineering and construction time estimates and cost analyses

Engineering

- Management of system and test engineers to restart a wet chemistry process
- Systems engineering support to maintain the HVAC operations for a nuclear production facility
- Management of closeout of open items associated with restart of Oak Ridge National Laboratory's (ORNL's) Inspection and Repackaging Project
- Configuration control authority and subject matter expertise for a 400,000-ft² nuclear storage facility
- Oversight for large-scale decontamination and decommissioning of a nuclear metals recycle facility
- Direct management for metallurgical operations and for fabrication and assembly groups in plutonium/pyrochemical operations
- Project management for execution of all activities associated with restoring enriched uranium capabilities to the Y-12 National Security Complex
- Quality assurance and oversight evaluation for a nuclear processing and storage facility

Summary of Qualifications

G2's qualifications encompass a wide range of skill sets. Key differentiators are as follows:

- Proven track record in providing readiness preparation assistance for all phases including design, construction, start-up and conduct of readiness assessments
- Analysis of processes and recommendations for efficiency improvements in real time
- Development of facility-specific business plans for decontamination and decommissioning (D&D), including detailed financial analyses
- Thorough understanding of how to recruit, manage, and maintain highly qualified, experienced personnel
- Proven ability to plan and schedule work assignments and resources
- Ability to manage inter-company costs to provide competitive pricing for the client
- Project management services to include production schedules with resource profiles, cost estimates, work breakdown structure (WBS) development, program plans and quality assurance plans
- Execution of all aspects of the design, procurement, installation (including facility modifications), testing, and first-use of equipment for execution of Title I, II, and III
- Successful completion/assistance in preparation/review of process documentation
- Full A/E support – Civil, Electrical, Mechanical, and Certified Professional Engineers
- Implementation of critical path methodologies (CPMs), procedure development, nuclear criticality studies, facility safety documentation, and earned value reports
- Management and coordination of troubleshooting and repair of equipment to restore operational efficiency for highly enriched uranium disposition, including component replacement and modification of ventilation equipment
- Extensive expertise in facility safety analysis
- Full environmental services
- Full waste management services
- Performing two emergency response contracts for EPA Regions 4 and 8, which include the following states:
 - Region 4: Kentucky, Tennessee, North Carolina, South Carolina, Mississippi, Alabama, Georgia, and Florida
 - Region 8: Montana, North Dakota, South Dakota, Wyoming, Utah, and Colorado
- Turnkey services with cradle-to-grave support throughout the life cycle of a project, to include (1) analysis of project requirements and regulations, (2) project implementation, and (3) quality assurance/quality control verification for project closeout
- À la carte services, including engineering, operations support, and readiness assessment to support acquisition of new facilities and systems and upgrades for existing assets

G2 has a proven track record of supporting engineering efforts of all sizes.

Conclusion

Reliable. G2's well-credentialed, qualified professional technical staff has formal training in technical disciplines including engineering, the life sciences, and the physical sciences, as well as extensive capabilities acquired on the job. Our personnel have many years of experience working with prime contractors in support of Federal and commercial agencies and can be relied upon to execute projects consistently and effectively.

Dependable. G2 has quickly established itself as an effective performer and is an award-winning business leader in East Tennessee through a concerted marketing effort and the recruitment of quality professionals. Based on our outstanding performance, G2 was recently named the

BWXT Y-12 Small Disadvantaged Business of the Year for 2003. G2 specializes in providing quality services that meet or exceed client expectations on time and within budget. This is achieved through implementation of strong resource management techniques. G2's management approach allows systematic oversight of performance and assurance of quality during the course of each task, ensuring that a standard of excellence is achieved.

Responsive. G2's team is committed to being responsive to customer and job requirements. Our staff members support clients in various locations nationwide, including Oak Ridge, Tennessee, and upcoming projects in Denver, Colorado; and Atlanta Georgia. Our

goal is to ensure that all of our customers receive the highest possible value for their investment by increasing productivity, responsiveness, and quality in support of project requirements.

G2 appreciates the opportunity to present these corporate qualifications for review and looks forward to working together on future opportunities that may arise. If you have questions concerning the information provided, please feel free to contact Wayman McLaughlin, Vice President of Engineering, or Rose Raney, Proposal Manager, at 865-482-4271, and we will be happy to meet with you to provide clarification or additional information.

- **Reliable**
- **Dependable**
- **Responsive**

Success . . . the only option!

G2 Engineering & Management, Inc.
101 Donner Dr.
Oak Ridge, TN 37830
Phone: 865-482-4271
Fax: 865-482-4273

G2em.com
